Development Control Committee A – 5 November 2014

ITEM NO. 3

WARD:	Avonmouth	CONTACT OFFICER:	Angelo Calabrese
SITE ADDRESS:	Land Eastern Side Of Chit Bristol	tening Trading Estate Gre	ensplott Road Avonmouth
APPLICATION NO:	14/03210/F	Full Planning	

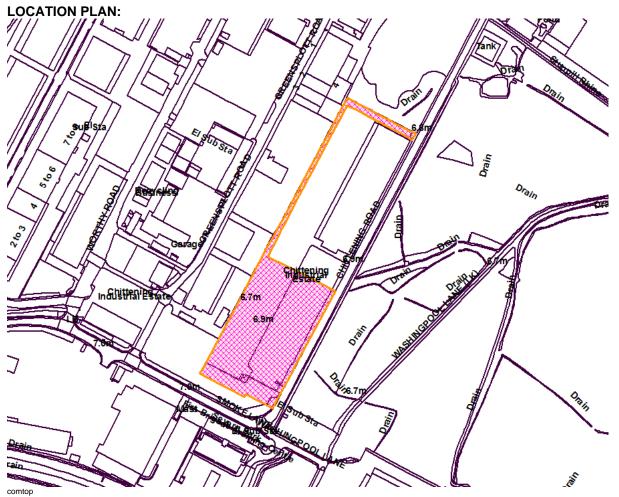
EXPIRY DATE: 30 September 2014

Erection of circa 11MWe bioenergy facility with ancillary office building and associated structures, landscaping and perimeter fencing and new access onto the A403 Chittening Road.

RECOMMENDATION: Grant subject to Condition(s)

AGENT: Atkins The Hub 500 Park Avenue Aztec West Almondsbury Nr. Bristol BS32 4RZ APPLICANT: Balfour Beatty Investments Limited C/o Agent

The following plan is for illustrative purposes only, and cannot be guaranteed to be up to date.



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Committee report

SITE DESCRIPTION

The application site is on the west side of Chittening Road within the industrial area of Avonmouth, near the boundary of Bristol and South Gloucestershire. The site is currently used to stockpile waste wood which is processed in a large warehouse building next door (to the north). A few years ago the site was occupied by large storage and distribution buildings. There is large mature vegetation on the boundary to the road.

The site is located in Flood Zone 3 and is also allocated as a Primarily Industrial and Warehouse area.

RELEVANT HISTORY

08/04633/F: Subdivision of existing industrial unit and construction of 3 no. industrial buildings (flexible B1(c), B2 and B8 Use Classes). Granted consent 23.02.2009.

12/00656/R: Application to replace the extant planning permission 08/04633/F in order to extend the time limit for implementation - Subdivision of existing industrial unit and construction of 3 no. industrial buildings (flexible B1(c), B2 and B8 Use Classes). Granted consent 15.05.2012. This permission does not appear to have been implemented.

APPLICATION

Planning permission is sought for the erection of an 11mw Biomass plant to produce electricity from waste wood. Electricity will be produced by a gasification process. The proposal consists of one large industrial building with a height of 20m and ancillary buildings which will include the steam turbine and air cooled condensers.

The development will also consist of a flue which will have a height of 40m. A conveyor belt will be erected between the site and the neighbouring waste wood treatment facility, which will serve the site as the fuel source. Vehicular access will be from the main access to the north (shared with neighbouring site), exit will only be possible from the new exit point shown on the plans. Staff car parking and cycle storage are included on the plans.

Following negotiations with officers, the application includes improvements to the highway by the vehicular exit point. The proposal will result in the loss of vegetation and trees from the boundary due to the requirement for a visibility splay. A landscape plan has been prepared with planting for 56 trees to replace lost trees.

The application includes amongst other things, a detailed Environmental Impact Assessment; Commentary Involvement Statement; Transport Statement; Flood Risk Assessment and a Construction Environmental Management Plan.

Waste wood:

The applicant has advised that the development fuel source will be waste wood primarily excepted from the Boomeco facility to the north of the site. The main sources of wood are from household waste stream disposed of at household waste recycling centres as well as construction and demolition waste. Material is brought to the neighbouring site from the former Avon area as well as Gloucester, Wiltshire and Oxford. At the moment the processed wood is sent to Europe to Biomass plants.

Gasification process:

With gasification, the fuel moves through stages of drying, pyrolysis, and gasification with temperatures in the gasifier reaching 980 degrees Celsius. As the fuel goes through the gasification process, chemical reactions occur and it is converted into a synthetic gas. This gas is passed through an oxidiser where it mixes with oxygen and is combusted. The resulting steam is distributed to the steam turbine where it generates electricity.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

A screening opinion was not considered necessary for the proposed development as it was deemed by the applicant to fall within Schedule 1 paragraph 10 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. This is because the development falls within this classification: waste disposal installations for the incineration or chemical treatment of nonhazardous waste exceeding 100 tonnes per day.

The applicant did request a scoping opinion from the Local Authority on the content of the EIA. The Local Planning Authority provided a scoping opinion on the 5 June 2014.

PRE APPLICATION COMMUNITY INVOLVEMENT

Process

The applicants carried out pre-application community involvement. A public information event was arranged in order to allow interested parties to understand the proposals. Invitations were sent to the local businesses and members of the Shirehampton Community Action Forum (SCAF). The event was held on 3 June 2014.

Outcomes

The community involvement statement, whilst limited, includes the main issues raised by local residents and provides a response to each.

RESPONSE TO PUBLICITY AND CONSULTATION

Neighbouring commercial properties were consulted by letter; an EIA site notice was posted and a press advert issued. 52 objections received. The following comments were made:

Principle of development -Key issue A

Inadequate supply of wood. Wood would be transported from forests in the USA, which worsen green house gas emissions.

Increase green house gases due to transportation of wood from as far as Hereford and Oxford.

Biomass plants are not sustainable.

Waste wood should be recycled.

Impact on amenity- Key Issue B

The site is utilising Boomeco's waste wood as so it is guaranteed a long term demand for their operations, the volume of waste wood handled in Avonmouth would increase. This would mean wood

dust problems for the next 20 years

The dust created by the stacking and loading of this current quantity of waste wood already causes significant nuisance and health hazards in Avonmouth. These have already been widely reported in the Press. Wood dust is classified by the World Health Organisation as a grade 1 carcinogen (causing cancer of the nasal passages.) The proposed handling of double the quantities of wood would continue in the open air, causing a serious health issues. (Case officer response: The application site will not store any wood outside. This will be controlled by condition. The neighbouring site is an existing facility that stockpiles wood. This neighbouring site has an Environmental Permit issued by the Environment Agency and the permit allows the storage of 75,000 tonnes.)

Waste wood will include hazardous waste wood Grade D as the wood which is collected from recycling centres is not sorted and includes grade D wood. (Case officer note: The types of waste that can be accepted into the facility will be strictly controlled by the Environmental Permit and monitored by the operator. No hazardous wood waste will be processed).

Treated wood is more polluting than virgin wood.

Landscape and visual impact-Key issue C

Bristol Tree Forum requested off site tree planting to replace lost trees.

Ecology- Key Issue E

Proposal will have a negative impact on air quality at protected sites.

Other issues-

Gasification plants built by Nexterra are a high risk experimental technology. (Case officer note: Guidance within National Policy Statement EN3 on Renewable Energy infrastructure advises that the type of technology uses should not be a concern (para 2.5.11)

The plant is in a flood zone. What precautions will be taken to stop wood fuel and ash being scattered?

The plant will not accept 'fines' from Boomeco. Fines are wood dust which is removed before fuel is burnt. (Case officer note: The applicant has advised that this dust can be processed by the facility and is also managed by the neighbouring facility)

How will toxic ash be disposed of? (Case officer response: There is an air management system/cleaning process designed into the facility. Fly ash will also be transported to a licensed facility for disposal. This is stated within the EIA)

There is no public knowledge of this planning application. (Case officer response: The application has been advertised and consulted on in accordance with statutory guidance and our local procedures)

Competition for waste wood fuel for other plants.(Case officer response: Competition between biomass plants is not a material consideration.)

The development is a fire hazard.

Comments from Local Ward Councilor Wayne Harvey:

As you will be aware, I have asked that the above planning application be referred to a Planning Committee for determination in light of its controversial nature and the level of local concern (and opposition) this has generated.

Whilst I have been persuaded that the applicants intend to use technology in their industrial and commercial processes that are very clean and purport to contain emissions within the site, many residents have yet to be persuaded and convinced that this facility will be safe.

In addition, as a result of incidents which were widely reported earlier this year involving unattributed dust deposits and biological infestations (flies) escaping from the Boomeco storage plant, local people are fearful that their health is being compromised in favour of commerce and industry.

There is also widespread concern over the increasing concentration of such biofuel reclamation, treatment and energy generating facilities in Avonmouth, as well as unease about the levels of environmental pollution in the area arising from ever-greater volumes of heavy goods vehicles on our roads servicing these activities.

I welcome the jobs and economic prosperity these developments promise but do not accept this can take place by compromising the health and well-being of local people.

Therefore, the case for and against this application needs to be aired fully in public, and any decision taken on it done in the most open, democratic and transparent manner possible under our planning system. No-one should be able to accuse the Authority, Planning Officers or Councillors of participating in some sort of carve-up behind closed doors over this sensitive application.

No doubt, some will never be satisfied by any outcome that does not go their way. Nevertheless, they must be given an opportunity to make their views known in a public forum. It is my belief all of these conditions and safeguards – particularly over accountability for decision-making - can only be met if this application is decided by elected Members and not made under delegated powers.

OTHER COMMENTS

Urban Design has commented as follows:-

No objections.

Transport Development Management has commented as follows:-

Following revisions to plans which include new pavement and traffic island, no objections raised.

Landscape has commented as follows:-

Following the submission of photomontages, no objections are raised to the conclusions within the EIA. Any loss of mature trees and hedgerow planting should be replaced in accordance with the Tree Replacement Guidelines.

Air Quality has commented as follows:-

No objections see key issue B.

Archaeology Team has commented as follows:-

No objections subject to conditions.

Nature Conservation Officer has commented as follows:-

No objections subject to conditions. See key issue section of report.

Contaminated Land Environmental Protection has commented as follows:-

No objections subject to conditions.

Flood Risk Manager has commented as follows:-

The flood resilience and resistance measures detailed in the FRA will mean flooding scenarios in excess of this will be controlled. With impermeable areas on site also not altering from the current situation the new development would be appropriate with regards to flood risk

Pollution Control has commented as follows:-

No objections subject to conditions.

Environment Agency (Sustainable Places) has commented as follows:-

No objections subject to conditions.

English Heritage has commented as follows:-

No objections subject to conditions.

Arboricultural Team has commented as follows:-

Following the submission of a revised landscape plan, which includes tree replanting. The scheme is acceptable.

RELEVANT POLICIES

i) National Policy

The main thrust of the UK energy policy is contained within the **Overarching National Policy Statement for Energy** (EN-1). While this policy document is used by the Planning Inspectorate to assess Major Infrastructure projects (Development Consent Order's) the information nonetheless provides useful guidance for smaller scale development, and in particular demonstrates the national thrust towards renewable energy.

National Policy Statement for Renewable Energy Infrastructure (EN-3) must be read alongside EN-1 and provides specific policies to the different energy infrastructure proposals, such as Biomass Plants.

The **National Planning Policy Framework** (NPPF) classifies biomass as renewable energy fuel and promotes the development of renewable energy and advises local authorities to approve applications if its impacts are (or can be made) acceptable. The NPPF also advises that local authorities should not require applicants for energy development to demonstrate the need for renewable energy projects

(para 98, NPPF)

The **Waste Management Plan for England 2013** sets out the Government ambition to work towards a more sustainable and efficient approach to resource use and management. This document explains how member states (of the EU) are required to move towards the aim of sufficiency in waste disposal and the recovery of waste (also called the 'proximity principle').

The National Planning Policy for Waste 2014(NPPW) was published on the 17th October 2014 and is linked to the national management plan. This document sets out the detail waste planning polices and should be read in conjunction with the NPPF. The NPPW requires local authorities to drive waste up the waste hierarchy, and that Local Authorities should recognise the need for a mix of types and scale of facilities and that adequate provision must be made for waste disposal. The guidance seeks to help to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment.

li) Local Policy

The **West of England Joint Waste Core Strategy 2011** sits alongside the **Bristol Core Strategy** and provides policies on waste management for the region.

Bristol Core Strategy (Adopted June 2011)

- BCS4 Avonmouth and Bristol Port
- BCS9 Green Infrastructure
- BCS10 Transport and Access Improvements
- BCS13 Climate Change
- BCS14 Sustainable Energy
- BCS15 Sustainable Design and Construction
- BCS16 Flood Risk and Water Management
- BCS21 Quality Urban Design
- BCS22 Conservation and the Historic Environment
- BCS23 Pollution

Bristol Site Allocations and Development Management Policies (Adopted July 2014)

- DM1 Presumption in favour of sustainable development
- DM13 Development proposals on principal industrial and warehousing areas
- DM15 Green infrastructure provision
- DM17 Development involving existing green infrastructure
- DM19 Development and nature conservation
- DM23 Transport development management
- DM25 Greenways
- DM26 Local character and distinctiveness
- DM27 Layout and form
- DM29 Design of new buildings
- DM33 Pollution control, air quality and water quality
- DM34 Contaminated land
- DM35 Noise mitigation

KEY ISSUES

- A) IS THE DEVELOPMENT ACCEPTABLE IN PRINCIPLE?
- i) Renewable energy:

The overarching National Policy Statements (NPS) while used to assess applications for large scale energy plants (Development Consent Orders) are useful to understand the significant national issues raised by energy use and the renewable energy targets that the UK has. These documents are also useful to identify key issues raised by renewable energy projects. (Documents: NPS EN1 and NPS EN3)

Paragraph 3.4.1 of the NPS EN1 states that "UK commitments to sourcing 15% of energy from renewable sources by 2020. To hit this target, and to largely decarbonise the power sector by 2030, it is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable electricity generation projects is therefore urgent"

Para 3.4.3 of the NPS EN1 states the following:

"...biomass is a significant source of renewable and low carbon energy....Its combustion also displaces emissions of carbon dioxide ordinarily released using fossil fuels;"

Also the biomass proposed to be utlised is waste wood. NPS EN-1 states the following regarding energy from waste plants:

"...the principal purpose of the combustion of waste, or similar processes (for example pyrolysis or gasification) is to reduce the amount of waste going to landfill in accordance with the Waste Hierarchy and to recover energy from that waste as electricity or heat....The energy produced from the biomass fraction of waste is renewable and is in some circumstances eligible for Renewables Obligation Certificates."

The National Planning Policy Guidance (NPPF) classifies biomass as renewable energy and promotes the development of renewable energy and advises local authorities to approve applications if its impacts are (or can be made) acceptable. The NPPF also advises that local authorities should not require applicants for energy development to demonstrate the need for renewable energy projects (para 98, NPPF).

ii) Waste:

The national guidance is set out in the National Planning Policy for Waste 2014. The planning objective for the Government is to help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option.

At local level, the relevant planning policy is within the West of England Partnership Joint Waste Core Strategy 2011. The main objectives of the strategy is to adapting to the impacts of climate change by encouraging renewable energy generation and reducing the reliance on landfill.

The proposal would utilize the wood waste currently accepted at the adjacent transfer facility where the wood is processed and then transported to Central Europe, in particular Sweden, as feedstock for waste to energy facilities. The proposed development will enable the waste wood to be treated within the UK and it will increase recovery levels with the resultant energy exported to the National Grid.

iii) Site allocation

The application site is located on a brownfield site within an allocated warehousing and industrial area. Policy BCS4 of the Core Strategy states that Avonmouth is a priority area for industrial and warehousing development. The policy also states that there may be opportunities for the development of energy from waste facilities and biomass energy. Based on the above assessment the development of a bioenergy plant is considered to be acceptable in principle subject to the assessment of the environmental impact.

iv) Other matters- Source of wood waste and lack of sufficient wood waste to serve the development

Lack of waste wood and potential for importation of wood from abroad:

A number of objectors have raised concerns that the development would involve importation of wood waste from outside the Avon area, that there is not enough waste wood to serve the development, which would result in importation of wood from outside of the UK.

An appeal decision in 2013 by the Secretary of State (SoS) for the development of a Biomass plant in Manchester (APPF5540/A/12/2174323) concluded that whilst evidence of waste wood availability is clearly a matter that affects the public perception of the scheme, the evidence was insufficient to show that existing generating capacity exceeds the likely supply of suitable waste wood. The SoS attached greater weight to the strong support expressed in national and local policy for a development which has the potential to contribute to renewable energy capacity and the related benefits of security and diversity of energy supply

The potential importation of wood also raises similar issues to the importation of biofuels from the continent that was considered by the Secretary of State (SoS) at the 2010 W4B appeal. The W4B proposal involved the importation of bio-liquids (palm oil) from abroad to produce electricity (The site is to the north west of Chittening Road- application: 09/03235/F). The SoS considered that the sustainability of bioliquids was a material consideration and in his conclusions he deemed it necessary to ensure that the development utilised fuel which was deemed 'sustainable'. A condition therefore was attached to the decision requiring the development to submit to the Council an annual report of the type required to be submitted to Ofgem in respect of the sustainability of bioliquids (for eligibility to Renewable Obligations Certificate- which the applicant is utilising for the funding of this project). While this condition for W4B permission refers to 'bioliquids', the same principles are applied to 'biomass'. Therefore it is intended to attach a similar condition to this proposal to address any issues members have with regard to the issue of sustainability.

Importation of waste wood from outside of Bristol.

The material is already at Avonmouth for processing, the proposed facility seeks to ensure that it is managed within the UK and the energy benefit from the feedstock is fed back into the UK grid rather than overseas. The development is moving waste up the hierarchy avoiding landfill.

In light of the above officers consider that national and local policies promote the development of renewable energy facilities in principle. Clearly as with any proposal the following issues have to be considered further.

B) IMPACT ON THE AMENITIES OF ADJOINING RESIDENTS AND BUSINESSES.

i) Air Quality

Policy BCS23 requires development to be designed in a way to avoid adversely impacting the environmental amenity and the surrounding area by virtue of dust, noise, light or any other form of air pollution.

DM33 states that development that has the potential for significant emissions to the detriment of air quality, particularly in designated Air Quality Management Areas (AQMA's), should include an appropriate scheme of mitigation. (Avonmouth is not within the AQMA declared by BCC)

The application includes a detailed air quality assessment within the EIA which includes a review of the cumulative impact of other sites with planning permission for facilities that have combustion processes. The following sites were included within the assessment:

Viridor Waste Incinerator Sita plant Kings Weston Lane, Biofuel Plant (W4B), Severn Road Sita (South Gloucestershire) Seabank power station Helius Energy New Earth Solutions, Kings Weston Iane

The EIA addresses the principal statutory pollutants which will be emitted, namely oxides of nitrogen (NO_x) , particulate matter (PM_{10}) , sulphur dioxide (SO_2) , and carbon monoxide (CO). The study also included dust. The EIA modelled ground level concentrations of these pollutants and have been assessed taking account of relevant air quality criteria for human health and ecological sites.

In April 2008, the European Commission adopted a directive on ambient air quality and cleaner air for Europe (2008/50/EC). This directive merged the 1996 Air Quality Framework Directive and the first three of its daughter directives and introduced new criteria for $PM_{2.5}$. The 2008 Directive is implemented in the UK through the Air Quality Standards Regulations 2010 (SI 2010/1001).

The regulations that implement the national air quality strategy objectives, which themselves reflect the EU limit values, are the Air Quality (England) Regulations 2000 (SI 2000/928); and \cdot Air Quality (England) (Amendment) Regulations 2002 (SI 2002/3043).

Polluntant	UK Objective	Results in the EIA
Nitrogen oxides, NO _x	Annual mean concentrations should not exceed 30 µg/m ³ for the protection of vegetation and ecosystems.	The annual mean NO _x objective for the protection of vegetation and ecosystems was not predicted to be exceeded at the Severn Estuary SAC, SSI and RAMSAR site and therefore the impact is not considered to be significant. The development proposal contributes 0.1% of the critical assessment level to annual NO _x concentrations at

The relevant air quality assessment criteria and the conclusions drawn by the EIA is below:

		the Avon Gorge Woodland SAC and is considered to be negligible.
Nitrogen dioxide, NO ₂	Hourly average concentration should not exceed 200 µg/m ³ more than 18 times a year Annual mean concentration should not exceed 40 µg/m ³	No exceedences of the 40 μ g/m ³ annual objective for NO ₂ were predicted at senstivie receptor locations considered in the assessment. Concentrations at all sensitive receptors will remain well below the 40 μ g/m ³ UK Air Quality Strategy (AQS) objective. No exceedences of the hourly objective were predicted at modelled receptor locations.
Particulates, PM ₁₀	24-hour mean concentration should not exceed 50 μg/m ³ more than 35 times a year Annual mean concentration should not exceed 40 μg/m ³	The maximum modelled increase in annual PM_{10} concentrations at any sensitive receptor location was 0.03 μ g/m ³ which is <1% of the assessment level for this pollutant and therefore considered imperceptible. No increase in the number of exceedences of the 24-hour objective is predicted.
PM _{2.5}	UK (except Scotland): annual mean concentration should not exceed 25 µg/m ³ by 2020 [2015]. UK urban areas: target of 15% reduction^ in concentrations at urban background sites between 2010 and 2020	Based on a very conservative assumption that all particulate matter is emitted as PM _{2.5} the maximum modelled increase of 0.03µg/m ³ at sensitive receptor locations is <1% of the assessment level for this pollutant and therefore considered imperceptible.
Sulphur dioxide, SO ₂	15-minute average concentration should not exceed 266 μg/m ³ more than 35 times a year Hourly average concentration should not exceed 350 μg/m ³ more than 24 times a year 24-hour mean concentration should not exceed 125 μg/m ³ more than 3 times a year Annual mean concentrations should not exceed 20 μg/m ³ for the protection of vegetation and ecosystems.	EIA states that the results for the maximum modelled daily Sulphur dioxide concentration at any modelled receptor location was equivalent to less than 2% of the AQS criterion. All other residential receptors lie beyond the 1.25 μ g/m ³ contour, which represents just 1% of the standard. The impact on 24- hour mean concentrations are therefore considered to be insignificant at all sensitive receptor locations. Modelling results show that impacts on hourly and 15 minute concentrations are also considered to be insignificant.

Carbon Monoxide (CO)	10mg/m ³ as a maximum daily running 8-hour mean	The field-wide maximum modelled result and all those at sensitive locations such as residential represent a negligible 0.1% or below of the air quality strategy objective. The effects of CO emissions are therefore
		considered to be insignificant.

The City Air Quality officer is satisfied with the assessment and has advised that the air quality section of the EIA provides a robust assessment of the predicted impacts of the proposed development. The facility will be operated under an Environmental Permit and will be required to meet requirements of the European Industrial Emissions Directive (IED) which will regulate emissions to air.

The development is not considered to have a significant impact on air quality and would not conflict with policies BCS23 and DM33.

ii) Dust and fugitive emissions.

The EIA has considered the potential impact of dust from construction and operational phases of the facility. In terms of the construction phase the EIA has scoped out the inclusion of an assessment of the impact of dust, due to the lack of sensitive receptors and as the area is dominated by commercial uses. The short term impact of construction work would not have a significant impact.

There has been a history of complaints from residents of Avonmouth Village of the impact of dust from wood chipping and the storing of wood waste in the open in areas of Bristol Port. While the application site is a significant distance from residential properties in Avonmouth village, the EIA has considered the impact of the dust and fugitive emissions.

The pre-prepared feedstock of shredded waste wood will be delivered from the adjacent waste facility via a conveyer system. The EIA states that all key operational activities will take place in buildings or covered areas. The development will provide containment mechanisms inherent in the facility design will ensure that fugitive emissions of dust during material transfer and handling of feedstock at the bioenergy facility will be negligible.

The EIA goes on to state that there will be no additional shredding of waste on site and that best practice measures for the storage and handling of the feedstock will be an inherent part of the facility design to ensure that fugitive emissions are prevented.

Therefore to ensure that the proposal does not compromise the amenity of the area, a condition will be attached to the permission which requires no wood to be processed and stored outside any buildings (of the application site), and that any movement of wood will be done in an enclosed receptacles (this includes the transportation of wood to the facility by vehicle).

Subject to condition the development would not result in a negative impact on the surrounding area in terms of fugitive dust emissions.

iii) Noise

The EIA includes a chapter dedicated to noise which considers the noise impacts caused by the construction and operational phases of the proposed facility. The assessment has included a Nosie sampling in locations near the application site to determined background noise levels

Construction noise:

During the noisiest phases of construction, noise impacts at West House Farm (derelict) are predicted to be 'negligible'. At the remaining receptors, which are all situated more than 700m (Farm to the east) from the site noise impacts are also predicted to be negligible.

Operational Noise:

At this stage of the EIA assessment, the full details of the equipment that will be in use as part of the proposed facility are not known. Therefore the assessment utilized information from previous projects and experience to predict noise levels of the equipment used on site. The conclusions made by the assessment is that operational noise levels are low and therefore no mitigation is require, as the assessment has focused on the impact on residential receptors.

Environmental Health officers have reviewed the assessment and are satisfied that the noise impact during construction is acceptable to the surrounding area would be negligible and any issues can be adequately controlled by a Construction Environmental Management Plan.

To ensure that the is no impact on any residential properties and commercial properties during the operation phases (particularly as equipment has not been finalized) a standard planning condition is recommended to ensure noise levels from plant and equipment are within acceptable levels.

The development would not have a significant noise impact.

iv) Impact on neighbouring commercial properties from bulk and mass of development.

The scale of development may have some impact on the commercial business located to the north west of the site, but as this is in commercial use, the sensitive nature of this use is significantly lower than a residential property. It is acknowledged that there will be some impact on light, overbearing impact, due to the 20m height of the development, but the impact is not considered to be significant to warrant a refusal.

(C) WOULD THE DEVELOPMENT HAVE AN ACCEPTABLE VISUAL IMPACT ON THE AREA?

Policy BCS21 of the Core Strategy and DM26-29 requires development to contribute to the character of an area, creating or reinforcing its local distinctiveness.

Part of the application site is currently used to stockpile waste wood, and has been vacant since warehouse buildings were demolished a few years ago. The main visual impact that the site makes to the area is the large boundary vegetation which includes mature trees. The boundary does make a positive visual impact. Coupled with Hallen Marsh to the east this part of Avonmouth arguably has its own, more rural character.

The application includes a detailed Landscape and Visual Impact Assessment as part of the EIA. This assessment includes a series of viewpoints which were agreed with the LPA to assess the impact of a large 20 m building with a 40m stack. Due to the fact that the existing site is currently vacant, and that a large building is proposed, it is clear that the development will have an impact on the surrounding area.

The assessment considers that the impact on the most sensitive receptors, are those in farms to the east and southeast, residents of Hallen and Berwick, residents of Kings Weston House and visitors, workers in the area, motorists travelling in the area, travellers on the train line to the west and walkers

using the Public Right Of Way (PROWS) in the local area.

The viewpoint assessment shows that the impact on long distance views would be negligible or have a minor adverse impact. While the roof of the building and the large flue would be visible on distance views, the surrounding industrial backdrop would result in the development having a negligible impact on the surrounding landscape character.

Concerns were raised by officers with regards to the short- medium distance views. As such the applicants were requested to update the viewpoints (viewpoints 1,2,3 and 4 of the EIA), to include a computer model of the proposed development.

Following review of the revised viewpoints, it is clear that the building will have an impact on these short views, given the size and scale of the development. Also, as the proposal will result in the removal of some mature trees on the boundary, the development will lose some screening looking northwards and southward towards the site. Notwithstanding this, the proposal does include a comprehensive landscape plan which includes 56 trees to be replanted on the site along the north and south boundary. Once matured this new tree planting and hedgerow (particularly on the south boundary) would ensure that the visual impact of the development is diminished.

It is considered that the EIA satisfactorily considers the visual impact of the development and the proposal subject to the implementation of the landscape plan would not have a significant negative visual impact on the area to warrant a refusal of planning permission.

(D) DOES THE PROPOSAL COMPLY WITH THE SUSTAINABILITY POLICIES OF THE CORE STRATEGY?

Policies BCS13-BCS16 requires development to have regard to mitigating climate change, reducing energy use and incorporate water management measures. The application includes a sustainability statement and a BREEAM pre-assessment with a rating of 'good'.

As the electricity generated will meet Ofgem energy requirements, the energy used by the facility will mean that there is no requirement for on-site renewable technology as the energy created is deemed renewable.

Thermal insulation will be optimised by using materials with low levels of thermal conductivity to minimise heat loss through the building fabric.

The development will include water efficient sanitary equipment, such as controlled flow rates.

The specification of major building elements will take into account life cycle impacts of the materials used with reference to the Green Guide to Specification, materials with an A or A+ rating. Specifically, materials with higher levels of recycled content (e.g. concrete, steel, superstructure etc) will be prioritised where practicable, to reduce embodied impacts.

The application also incorporates a large number of new tree planting and landscaping which will enhance the biodiversity of the site.

Policy BCS14 also promotes the use of combined heat and power (CHP) and district heating. The policy requires major development within heat priority areas of the city to incorporate CHP. Outside these areas the policy states CHP will be encouraged.

Avonmouth is not located within a Heat Priority Area (as identified by policy BCS14), and the

development does not incorporate any CHP. The applicant advises in the EIA that "the outputs from the process do produce heat but this is of low grade which is less efficient. There are also limited markets for the heat within the surrounding area and this coupled with the lack of infrastructure and the low heat potential of the facility make a heat option unfeasible at present. The applicants have had initial talks with some of the local industry owners and are exploring potential heat load requirements. If a substantial heat load is identified in proximity to the bioenergy facility, the applicant will assess the viability of utilising heat off-take to provide this heat supply."

National Guidance on the incorporation of CHP in renewable energy plants states that to be economically viable as a CHP plant, a generating station needs to be located close to industrial or domestic customers with heat demands (NPS EN1).

As the information submitted within the EIA was limited, the City Energy Infrastructure Manager requested further technical information from the applicant, in particular whether the applicant could consider incorporating a more efficient CHP plant over steam turbine, in order to understand the reasoning behind the lack of CHP and district heating.

In response the developer has advised that they have reviewed the local heat map as part of the site selection process to identify local heat requirements and had discussed the potential of the supply of heat with a number of operators in the immediate vicinity during the pre-application public consultation phase. None of those enquiries have led to the identification of a consistent heat profile that would justify the loss of efficiency from a seasonal heat demand. The system will be inefficient, below the suggested levels, if the full heat potential for that design is not consistently required, therefore seasonal demands will reduce the efficiency.

The City Energy Infrastructure manager has reviewed the information and has advised that the lack of CHP/district heating is acceptable in these circumstances, particularly due to the limited research to date on heat demand in the Avonmouth area. As the developer has advised that a review of the potential for heat export will be considered, a suitable condition will be attached to the permission to require a heat export feasibility review prior to the commissioning of the development.

Based on the above assessment the development is considered to be in accordance with the climate change and sustainability policies of the Core Strategy.

(E) DOES THE PROPOSAL RAISE ANY ECOLOGICAL ISSUES?

Policy BCS9 and DM19 require development protect sites of nature conservation importance and mitigate any negative impact.

The applicants have carried out a Habitat Regulations Assessment which considers if the proposal would have a significant impact on European designated sites The proposal is located 235 m away from the Honda Pools site (to the south west), which has potential to support internationally significant number of protected birds. Other important European sites in the Bristol area include the Severn Estuary Special Areas of Conservation (SAC), Special Protection Area (SPA), Ramsar site is located 500m to the north west and the Avon Gorge Woodlands SAC approximately 5km to the south. The assessment also included sites within South Gloucestershire, and North Somerset.

The assessment includes consideration of impacts on air quality. Nitrogen deposition has been modelled at the Severn Estuary and Avon Gorge European conservation sites and the significance of deposition assessed against the Air Pollution Information System (APIS) recommended critical loads for these habitats. Dispersion modelling shows that the proposed facility will contribute to between 0.1% and 0.3% of the relevant critical load for nitrogen deposition at the Severn Estuary and Avon

Gorge sites. The contribution is well below the accepted level at which these impacts are considered insignificant and can be screen out which is set at <1% of the relevant critical load in the Environment Agency's H1 Environmental Risk Assessment Framework.

The applicant has confirmed within the HRA screening assessment document, that this proposal is likely to involve percussive piling (which has the potential to disturb birds). The applicant has not undertaken a wintering bird survey of the Honda Pools as such a condition will be required to control construction methods and the timing of piling and also a requirement for detailed Construction Environmental Management Plan.

The City Ecologist and Natural England have raised no objections to the proposal subject to those conditions, therefore development is considered to comply with polices BCS9 and DM19.

(F) DOES THE PROPOSAL COMPROMISE ANY ARCHAEOLOGY INTEREST?

Policy BCS22 requires development to safeguard heritage assets and the character and setting of areas of archeologically importance. Policy DM31 also reflects this requirement.

The proposed development lies within an area of high palaeo-environmental potential. The area is known for deeply buried deposits of alluvium and peat, which preserve the remains of early human activity in the area.

An archaeological report submitted with a previous application for development on this site indicates that this was agricultural land in low lying salt marsh until post-medieval development. During the First World War the adjacent site was developed as a munitions factory complete with its own rail infrastructure.

Consequently this site is of archaeological interest and monitoring of development ground works will be required as a condition of permission. Subject to this condition, both the City Archaeologist and English Heritage have no objections to the proposals, which are considered to comply with the above policies.

(G) DOES THE PROPOSAL RAISE ANY TRAFFIC ISSUES OR CONFLICT WITH HIGHWAY SAFETY?

Policies BCS10 and DM23 require development to provide safe and adequate access onto the highway network for all users and also consider the potential traffic impact. The application includes a Transport Assessment which has been reviewed by Highways Development Management officers.

Traffic generation:

The assessment has reviewed the existing and proposed levels of traffic associated with the neighbouring waste transfer site, along with the anticipated traffic generation and impact associated with the proposed development. It has used the existing figures of the neighbouring facility (as the contract arrangements will not require any further deliveries of wood) and states that the proposal will result in a reduction in vehicular movements in the area due to the fact that the scheme would result in a reduction in trips from the site when the wood is exported. The assessment states that there will be a reduction in HGV movements of approximately 2,855 movements on the local highway network, which is a decrease of 14 two way movements a day.

Highway officers have reviewed this information and have also considered the proposal as if it were independent of the neighbouring facility, they have concluded that the level of trip generation is comparable to the previously approved Industrial, storage and distribution use (12/00656/R). The

below table shows the potential difference in trip generation:

Approved Extant Application	Proposed Development	Worst Case Scenario
30 HGV movements per day	–14 HGV movements per day from current Boomeco trip generation	28 HGV movements per day (14 more HGV movements than existing Boomeco trip generation)

The impact of this development on the highway network is not significant and the proposal would create a level of traffic which is acceptable for this industrial location with satisfactory highlight network and good links to the motorway.

Highway safety:

The application site is located on a road that has no pedestrian pavement. There is a national cycle route opposite the application site which is also allocated as a Greenway route. Concerns have been raised in terms of adequacy of a visibility splay from the proposed site exit and the necessity for improvements to provide suitable access for cyclists and pedestrians.

During a series of negotiations the applicants now propose adequate visibility splays to ensure that HGV vehicles can exit the site safely. The visibility splay required will necessitate the removal of mature boundary vegetation. The loss of this vegetation is acceptable as it is essential to provide a safe exit for vehicle and acceptable replacement tree planting is proposed to satisfy key issue (c).

To ensure suitable access for pedestrians and cyclists, officers have also negotiated the creation of a traffic island and pavement to enable pedestrians to cross from the cycle route to the application site.

The highway improvements are to be secured. A separate agreement under section 278 of the Highway Act 1980 will also be required.

(H) DOES THE DEVELOPMENT ADDRESS THE LOSS OF BOUNDARY TREES?

Policy BCS9 and DM17 require development to integrate existing trees into the proposal. Where trees are lost to allow for appropriate development, replacement tress should be provided following the Bristol Tree replacement standard.

The application will result in the loss of large trees on the boundary of the site. Tree removal is required to ensure that a suitable visibility splay is provided at the vehicular exit point. The loss of trees is unfortunate, but necessary.

Officers have negotiated with the applicant to have a robust landscape scheme which includes tree planting on the site to mitigate the loss of trees. Following a series of negotiations the applicant has provided an arboricultural report and landscape plan. Officers have reviewed the report and advised that a total of 57 tress are required under the replacement standards. Officers advised the applicant that in order to support the loss of trees, a robust scheme is required that includes details of planting pits (as the new tree planting will take place in existing areas of hardstanding) and a hedgerow which has good spacing of transplants with standard trees.

A revised plan has been received from the agent which accords with the advice a will ensure that suitable hedgerow would be planted which is similar to the line of vegetation on the site frontage.

The landscape plan is considered to accommodate as much tree planting as is possible on the site and it is therefore considered that the development is in accordance with policies BCS9, DM15 and DM17.

I) DOES THE DEVELOPMENT ADEQUATELY CONSIDER FLOOD RISK?

Policy BCS16 requires development in Bristol to follow a sequential approach to flood risk management, giving priority to the development of sites with the lowest risk of flooding. The development of sites with a sequentially greater risk of flooding will be considered where essential for regeneration or where necessary to meet the development requirements of the city.

Development in areas of flood risk will be resilient to flooding through design and layout, and/or incorporate designed mitigation measures.

In terms of the sequential assessment and the steering of development to areas of lesser flood risk, the application site is allocated for industrial purposes and therefore the Bristol Strategic Flood Risk Assessment has already considered that this site is suitable for industrial/commercial development. The proposal is for a less vulnerable use (as classified by the Flood risk vulnerability and flood zone 'compatibility in the NPPF) and is appropriate in Flood Zone 3.

The site is located within Flood Zone 3 and the application includes a Flood Risk Assessment (FRA) which has been reviewed by the Environment Agency and the Flood Risk team in the Council.

Concerns were raised given predicted flood level over the lifetime of the development, predicted to be 7.6 AOD in a flood event. As such an addendum to the FRA was submitted to address these points, which details the main equipment and facilities are to be above these levels.

As the Environment Agency and Flood Risk officers have raised no objections on the technical details of the FRA the development is considered to be acceptable subject to conditions requiring the standard flood evacuation plan and the implementation of the measures detailed in the applicants flood risk addendum

The proposal is considered to address policy BCS16.

J) DOES THE DEVELOPMENT RAISE ANY CONTAMINATED LAND ISSUES?

Policy BCS23 requires Development to be sited and designed in a way as to avoid adversely impacting upon creating exposure to contaminated land. Policy DM34 requires development to demonstrate that any existing contamination of the land will be addressed by appropriate mitigation measures to ensure that the site is suitable for the proposed use and that the development will not cause the land to be contaminated.

The EIA includes an initial investigation of the site which has identified some contamination of the soils and groundwater at the site, but the extent of remediation is uncertain at this stage and will be determined following detailed intrusive ground investigation.

The Ground Contamination officer has reviewed the information as have the Environment Agency. Both have advised that subject to standard planning conditions which require pre-site investigation and remediation works (before commencement of development) the proposal would not compromise any ground contamination on the site.

COMMUNITY INFRASTRUCTURE LEVY

How much Community Infrastructure Levy (CIL) will this development be required to pay?

This development is liable for CIL, however the CIL rate for this type of development, as set out in the CIL Charging Schedule, is £nil and therefore no CIL is payable.

CONCLUSION

The principle of a Biomass plant in Avonmouth is supported by both national and local policy and the proposal has the potential to contribute to renewable energy. The scheme will not raise any significant impacts on air quality for humans and wildlife and would not have a negative impact on the character and appearance of the industrial area. No significant transport issues are raised and the scheme will mitigate the loss of mature trees.

Subject to the following conditions the proposal would comply with the Bristol Core Strategy and Site allocations And Development Management Policies and is recommended for approval.

RECOMMENDED GRANTED subject to condition(s)

Time limit for commencement of development

1. Full Planning Permission

The development hereby permitted shall begin before the expiration of three years from the date of this permission.

Reason: As required by Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

Pre commencement condition(s)

2. Approval of road works necessary

No development shall take place until details of the following works to the highway have been submitted to and approved in writing by the Local Planning Authority.

1. Proposed pavement, visibility splay and traffic island

The development shall not commence until the works to both visibility splays are constructed in accordance with the approved details.

Reason: To ensure that all road works associated with the proposed development are to a standard approved by the Local Planning Authority and are completed before occupation, in the interests of highway safety.

3. Flood evacuation plan - commercial property

No development shall take place until the applicant has submitted to and had approved in writing by the Local Planning Authority a Flood Warning and Evacuation Plan (FEP). This Plan shall include the following information:

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* command & control (decision making process and communications to ensure activation of FEP);

* training and exercising of personnel on site (H& S records of to whom and when);

* flood warning procedures (in terms of receipt and transmission of information and to whom);

* site evacuation procedures and routes; and

* provision for identified safe refuges (who goes there and resources to sustain them).

The FEP shall be reviewed at intervals not exceeding 3 years, and will form part of the Health & Safety at Work Register maintained by the applicant.

Reason: To limit the risk of flooding by ensuring the provision of a satisfactory means of flood management on the site.

4. BREEAM

No development shall take place until evidence that the development is registered with a BREEAM certification body and a pre-assessment report (or design stage certificate with interim rating if available) has been submitted indicating that the development can achieve the stipulated final BREEAM level. No building shall be occupied until a final Certificate has been issued certifying that BREEAM (or any such equivalent national measure of sustainable building which replaces that scheme) rating Good has been achieved for this development unless the Local Planning Authority agrees in writing to an extension of the period by which a Certificate is issued.

Reason: To ensure that the development achieves BREEAM rating level Good (or any such equivalent national measure of sustainability for building design which replaces that scheme) and assessment and certification shall be carried out by a licensed BREEAM assessor and to ensure that the development contributes to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions.

5. Protection of retained trees during the construction period

No work of any kind shall take place on the site until a plan showing the position of tree protective fencing has been submitted to and approved in writing by the Local Planning Authority.

The Local Planning Authority shall be given not less than two weeks prior written notice by the developer of the commencement of works on the site in order that the council may verify in writing that the approved tree protection measures are in place when the work commences. The approved fence(s) shall be in place before any equipment, machinery or materials are brought on to the site for the purposes of the development and shall be maintained until all equipment, machinery and surplus materials have been removed from the site. Within the fenced area(s) there shall be no scaffolding, no stockpiling of any materials or soil, no machinery or other equipment parked or operated, no traffic over the root system, no changes to the soil level, no excavation of trenches, no site huts, no fires lit, no dumping of toxic chemicals and no retained trees shall be used for winching purposes. If any retained tree is removed, uprooted or destroyed or dies, another tree shall be planted at the same place and that tree shall be of such size and species, and shall be planted at such time, as may be specified in writing by the council.

Reason: To protect the retained trees from damage during construction and in recognition of the contribution which the retained tree(s) give(s) and will continue to give

to the amenity of the area.

6. Land affected by contamination - Site characterisation

No development shall take place until an investigation and risk assessment, in addition to any assessment provided with the planning application, has been completed in accordance with a scheme to assess the nature and extent of any contamination on the site, whether or not it originates on the site. The contents of the scheme should be submitted to and be approved in writing by the Local Planning Authority. The investigation and risk assessment must be undertaken by competent persons and a written report of the findings must be produced. The written report is subject to the approval in writing of the Local Planning Authority. The report of the findings must include:

(i) a survey of the extent, scale and nature of contamination;

(ii) an assessment of the potential risks to:

* human health,

* property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,

- * adjoining land,
- * groundwaters and surface waters,
- * ecological systems,
- * archaeological sites and ancient monuments;

(iii) an appraisal of remedial options, and proposal of the preferred option(s).

This must be conducted in accordance with DEFRA and the Environment Agency's "Model Procedures for the Management of Land Contamination, CLR 11".

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

7. Land affected by contamination - submission of remediation scheme

No development shall take place until a detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and the natural and historical environment has been prepared, submitted to and approved in writing by the Local Planning Authority. The scheme must include all works to be undertaken, proposed remediation objectives and remediation criteria, timetable of works and site management procedures. The scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

8. Land affected by contamination - implementation of approved remediation scheme

In the event that contamination is found, no development other than that required to be carried out as part of an approved scheme of remediation shall take place until the approved remediation scheme has been carried out in accordance with its terms. The Local Planning Authority must be given two weeks written notification of commencement of the remediation scheme works.

Following completion of measures identified in the approved remediation scheme, a verification report that demonstrates the effectiveness of the remediation carried out must be produced, and be approved in writing of the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

9. Site specific construction environmental management plan

No development shall take place until a site specific Construction Environmental Management Plan has been submitted to and approved in writing by the Council. The plan must demonstrate the adoption and use of the best practicable means to reduce the effects of noise, vibration, dust and site lighting. The plan should include, but not be limited to:

* Procedures for maintaining good public relations including complaint management, public consultation and liaison

* Arrangements for liaison with the Council's Pollution Control Team

* All works and ancillary operations which are audible at the site boundary, or at such other place as may be agreed with the Local Planning Authority, shall be carried out only between the following hours:

08 00 Hours and 18 00 Hours on Mondays to Fridays and 08 00 and 13 00 Hours on Saturdays and; at no time on Sundays and Bank Holidays.

* Deliveries to, and removal of plant, equipment, machinery and waste from the site must only take place within the permitted hours detailed above.

* Mitigation measures as defined in BS 5528: Parts 1 and 2 : 2009 Noise and Vibration Control on Construction and Open Sites shall be used to minimise noise disturbance from construction works.

* Procedures for emergency deviation of the agreed working hours.

* Bristol City Council encourages all contractors to be `Considerate Contractors' when working in the city by being aware of the needs of neighbours and the environment.

* Control measures for dust and other air-borne pollutants. This must also take into account the need to protect any local resident who may have a particular susceptibility to air-borne pollutants.

* Measures for controlling the use of site lighting whether required for safe working or for security purposes.

* The plan shall ensure that adverse impacts (including dust and aerial pollution, effects on water quality, pollution from fuel use and storage and other potentially hazardous materials) on the European Site as a result of construction works are eliminated or minimised

Reason: In the interests of the amenities of surrounding occupiers and wildlife interests.

10. To ensure implementation of a programme of archaeological works

No development shall take place within the area indicated on plan number PLA 003 p10 until the applicant/developer has secured the implementation of a programme of archaeological work, in accordance with a Written Scheme of Investigation which has been submitted by the developer and approved in writing by the Local Planning Authority.

The scheme of investigation shall include an assessment of significance and research questions; and:

* The programme and methodology of site investigation and recording

* The programme for post investigation assessment

* Provision to be made for analysis of the site investigation and recording

* Provision to be made for publication and dissemination of the analysis and records of the site investigation

* Provision to be made for archive deposition of the analysis and records of the site investigation

* Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.

Reason: To ensure that archaeological remains and features are recorded prior to their destruction.

11. Noise from plant & equipment affecting non-residential

No development shall take place until an assessment on the noise from any plant & equipment, as part of this development at any sensitive industrial premises, has been submitted to and approved in writing by the Council. The assessment will need to show that noise, from any plant & equipment, will be at such a level that internal noise levels at any sensitive industrial premises will be in accordance with those noise levels recommended by BS 8233: 2014 " Guidance on sound insulation and noise reduction for buildings". The assessment shall give noise limits that will need to be achieved 3.5 metres from the façade of any sensitive industrial premises with the windows for the building open for ventilation if appropriate. The development will be carried out in accordance with the approved details.

Reason: To protect the amenity of neighbouring commercial properties.

12. Noise from plant & equipment affecting residential

No development shall take place until an assessment to show that the rating level of any plant & equipment, as part of this development, will be at least 5 dB below the background level at any time at residential premises. The development will be carried out in accordance with the approved details.

The assessment must be carried out by a suitably qualified acoustic consultant/engineer and be in accordance with BS4142: 1997-"Method of rating industrial noise affecting mixed residential and industrial areas".

Reason: To protect the amenity of neighbouring residential properties.

13. No percussive piling shall be undertaken between September and March inclusive within a 300 metre distance to the Honda Pools unless otherwise agreed in writing by the Local Planning Authority.

Reason: To prevent disturbance of wading and wildfowl species associated with the Severn Estuary European Marine Site and comply with the Conservation of Habitats and Species Regulations 2010 (as amended).

14. To secure the conduct of a watching brief during development groundworks

The applicant/developer shall ensure that all groundworks, including geotechnical works, are monitored and recorded by an archaeologist or an archaeological organisation to be approved by the council and in accordance with the Written Scheme of Investigation approved under condition.

Reason: To record remains of archaeological interest before destruction.

Pre occupation condition(s)

15. Land affected by contamination - Reporting of Unexpected Contamination

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken in accordance with the requirements of Condition 8 and where remediation is necessary a remediation scheme must be prepared in accordance with the requirements of Condition 7, which is to be submitted to and be approved in writing by the Local Planning Authority.

Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority in accordance with condition 7.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

16. Completion of vehicular access, pavement and traffic island - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the means of vehicular access, pavement and traffic island has been constructed and completed in accordance with the approved plans and the said means of vehicular access shall thereafter be maintained in perpetuity.

Reason: In the interests of highway safety.

17. Completion and maintenance of car/vehicle parking - shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the car/vehicle parking area shown on the approved plans has been be completed, and thereafter, the area shall be kept free of obstruction and available for the parking of vehicles associated with the development

Reason: To ensure that there are adequate parking facilities to serve the development.

18. Land affected by contamination - Reporting of Unexpected Contamination

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken in accordance with the requirements of Condition 6 and where remediation is necessary a remediation scheme must be prepared in accordance with the requirements of Condition 7, which is to be submitted to and be approved in writing by the Local Planning Authority.

Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority in accordance with condition 7.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

19. Prior to the commissioning of the facility, an independent Heat Export Feasibility Review shall be undertaken to assess the potential commercial opportunities for the production and supply of heat to a distribution network and submitted to the Local Planning Authority. This shall include details for the ongoing monitoring and full exploration of potential commercial opportunities to use heat from the facility and for subsequent reviews of such commercial opportunities as necessary. Where viable opportunities for the use of heat in such a scheme are identified detailed proposals for the provision of necessary plant and pipe work to the boundary of the site shall be submitted to and approved in writing by, the Local Planning Authority. Any plant and pipework installed to the boundary of the site to enable the production and supply of heat to be installed in accordance with the agreed details.

Reason: To ensure that waste heat is available for use to the benefit of the local domestic, commercial and industrial users when the demand arises.

20. The commissioning of the facility shall not take place until sufficient plant and pipework has been installed to ensure that there are no barriers to the future supply of heat to the boundary of the site under Condition (19) at a later date if opportunities to do so are identified pursuant to Condition (19).

Reason: To ensure that waste heat is available for use to the benefit of the local domestic, commercial and industrial users when the demand arises.

21. To secure the conduct of a watching brief during development groundworks

The applicant/developer shall ensure that all groundworks, including geotechnical works, are monitored and recorded by an archaeologist or an archaeological organisation to be approved by the council and in accordance with the Written Scheme of Investigation approved under condition 2.

Reason: To record remains of archaeological interest before destruction.

Post occupation management

22. Travel plans - submitted

The Approved Travel Plan shall be implemented in accordance with the timescales specified therein, to include those parts identified as being implemented prior to occupation and following occupation, unless alternative timescales are agreed in writing with the Local Planning Authority. The Approved Travel Plan shall be monitored and reviewed in accordance with the agreed Travel Plan targets to the satisfaction of the Local Planning Authority.

Reason: To support sustainable transport objectives including a reduction in single occupancy car journeys and the increased use of public transport, walking and cycling.

23. Landscape (planting) works - shown

The planting proposals hereby approved shall be carried out no later than during the first planting season following the date when the development hereby permitted is ready for occupation or in accordance with a programme agreed in writing with the council. All planted materials shall be maintained for five years and any trees or plants removed, dying, being severely damaged or becoming seriously diseased within 5 years of planting shall be replaced with others of similar size and species to those originally required to be planted.

Reason: To ensure that the appearance of the development is satisfactory.

24. Noise from plant & equipment affecting residential

The rating level of any noise generated by plant & equipment as part of the development shall be at least 5 dB below the pre-existing background level at any time at residential premises.

Any assessments to be carried out and be in accordance with BS4142: 1997-"Method of rating industrial noise affecting mixed residential and industrial areas".

Reason: To protect the amenity of neighbouring residential properties.

25. No raw materials or waste shall be stored in external areas of the site.

Reason: As stated within the EIA and to ensure that the development does not compromise the amenity of the area.

26. No more than 75,000 tonnes of wood shall be treated at the site per annum.

Reason: The application has been assessed on this maximum tonnage stated within the supporting documentation and to ensure the development does not compromise transport and the amenity of the area and the agreed mitigation.

27. Vehicles transporting waste to and from the site shall be fully enclosed at all times.

Reason: In the interests of the amenity of the area.

28. The development hereby approved shall only operate whilst any biomass used as fuel in the electricity generating engines shall satisfy the sustainability criteria, and for the purposes of this condition:

(a) 'Biomass' has the meaning given by Article 2(e) of the Renewables Directive;
(b) 'sustainability criteria' means such criteria relating to the sustainability of biomass as are set out in the Renewables Directive from time to time;
(c) 'Renewables Directive' means Directive 2009/28 of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, as amended

or replaced from time to time.

Reason: To ensure that the fuel used complies with the National criteria of a sustainable fuel.

29. Throughout the operational life of the Development, there shall be submitted to the Council annual reports on the sustainability of all biomass used as fuel in the electricity generating engines of the Development which provide the same information and levels of assurance and verification which the operator of the Development is required (or would be required, if claiming financial assistance).

Reason: To ensure that the fuel used complies with the National criteria of a sustainable fuel.

List of approved plans

30. List of approved plans and drawings

The development shall conform in all aspects with the plans and details shown in the application as listed below, unless variations are agreed by the Local Planning Authority in order to discharge other conditions attached to this decision.

PLA_001 P01 - Site location plan, received 1 July 2014 PLA_002 P01 - Site boundary plan, received 1 July 2014 PLA_003 P10 - General arrangement site layout (internal view of plan) with access road, received 1 July 2014 PLA_004 P03 - General arrangement site layout (internal view of plan) without access road, received 1 July 2014 PLA_005 P03 - Roof plan, received 1 July 2014 PLA_006 P04 - Elevations, received 1 July 2014 PLA_007 P04 - Elevations, received 1 July 2014 PLA_009 D - Landscape proposals plan, received 9 October 2014 5130448-ATK-XX-DR-C-007 P01 - Plan and sections, received 1 July 2014 PLA_011 P01 - Welfare block/admin building ground floor, received 1 August 2014 PLA_012 P01 - Welfare block admin building first floor, received 1 August 2014 PLA_013 P01 - Welfare block admin building second floor layout, received 1 August 2014

Reason: For the avoidance of doubt.

Advice(s)

- 1. The developer will be required to enter into a Section 278 Agreement under the Highway Act 1980. This agreement is to secure the pavement, traffic island and visibility splay.
- 2. The applicant is advised that the Severn Estuary and its supporting habitat is a highly protected site for wildlife and ecology of international importance.

The Severn Estuary Special Protection Area (SPA) Features of Interest:

Under Article 4.1 of the Birds Directive EC 79/409 for wintering populations of Bewick's swan Cygnus columbianus bewickii

Under Article 4.2 of the Birds Directive EC 79/409 for regularly supporting in winter internationally important numbers (usually but not always taken to be 1% of the total Severn Estuary population) of the following 5 species of migratory waterfowl: 3,002 European white-fronted goose Anser albifrons albifrons, 2,892 shelduck Tadorna tadorna, 330 gadwall Anas strepera, 41,683 dunlin Calidris alpina, 2,013 redshank Tringa tetanus

Under Article 4.2 of the Birds Directive EC 79/409 for regularly supporting in winter over 20,000 wildfowl. An internationally important assemblage of waterfowl. Assemblage includes the above species plus the following listed nationally important populations - 3,977 wigeon, 1,998 teal, 523 pintail, 1,686 pochard, 913 tufted duck, 227 ringed plover, 781 grey plover, 3,096 curlew, 246 whimbrel and 3 spotted redshank.

The Severn Estuary Wetland of International Importance (Ramsar Site) Features of Interest

Criterion 1 of the Ramsar convention due to its immense tidal range. Criterion 2b due to its unusual estuarine communities, reduced species diversity and high productivity.

Criterion 2c as it is important for the run of migratory fish between sea and river via estuary. Species include Salmon Salmo salar, sea trout S. trutta, sea lamprey Petromyzon marinus, river lamprey Lampetra fluviatilis, allis shad Alosa alosa, twaite shad A. fallax, and eel Anguilla anguilla.

Criterion 2c as it is particularly important for migratory birds during passage periods in spring and autumn, especially for ringed plover Charadrius hiaticula, dunlin, whimbrel Numenius phaeopus and redshank.

Criterion 3a by regularly supporting over 20,000 waterfowl.

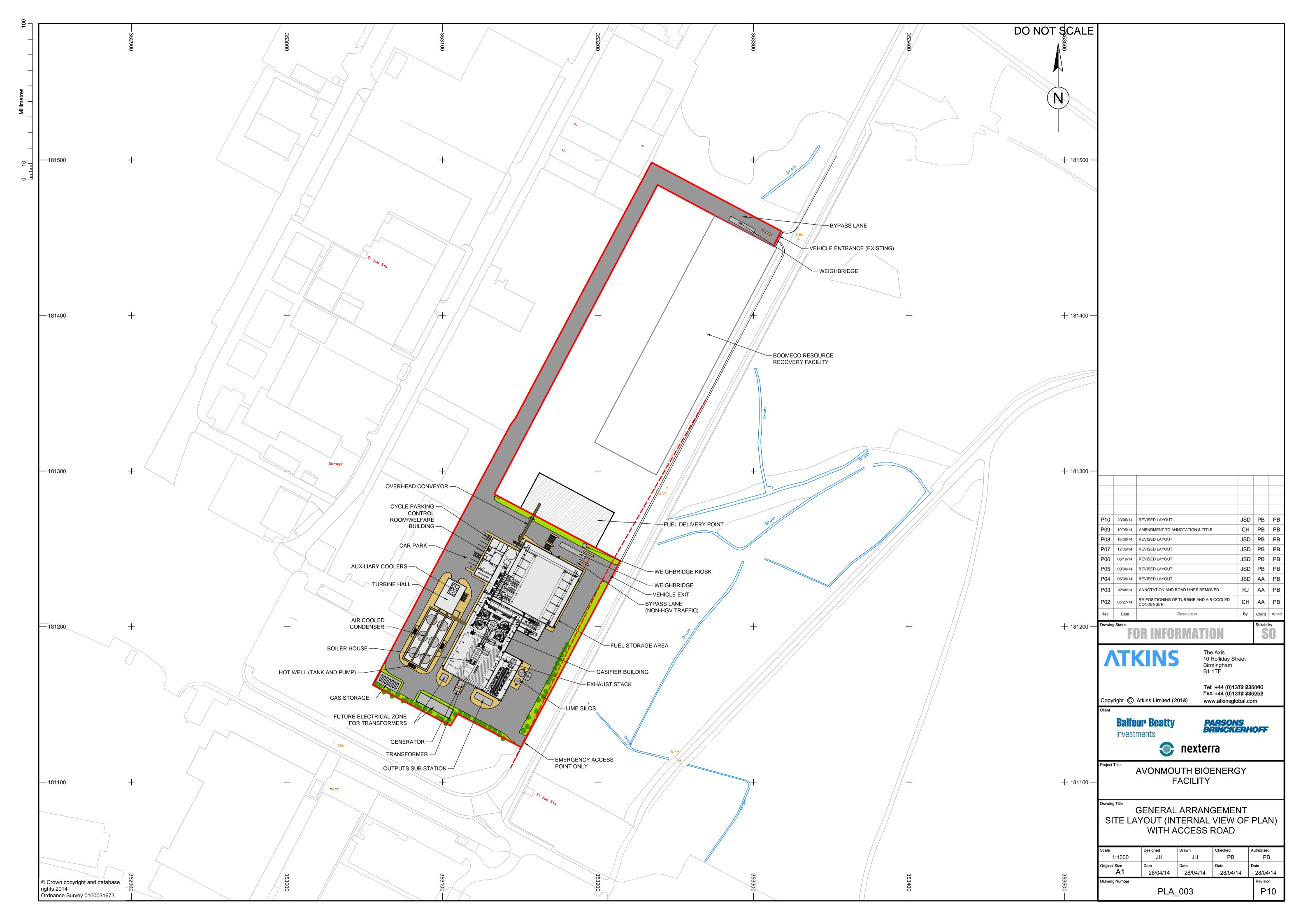
Criterion 3c by regularly supporting internationally important wintering populations of 3,002 European white-fronted goose, 289 Bewick's swan, 2,892 shelduck, 330 gadwall, 41,683 dunlin and 2,013 redshank and nationally important wintering populations of 10 other species.

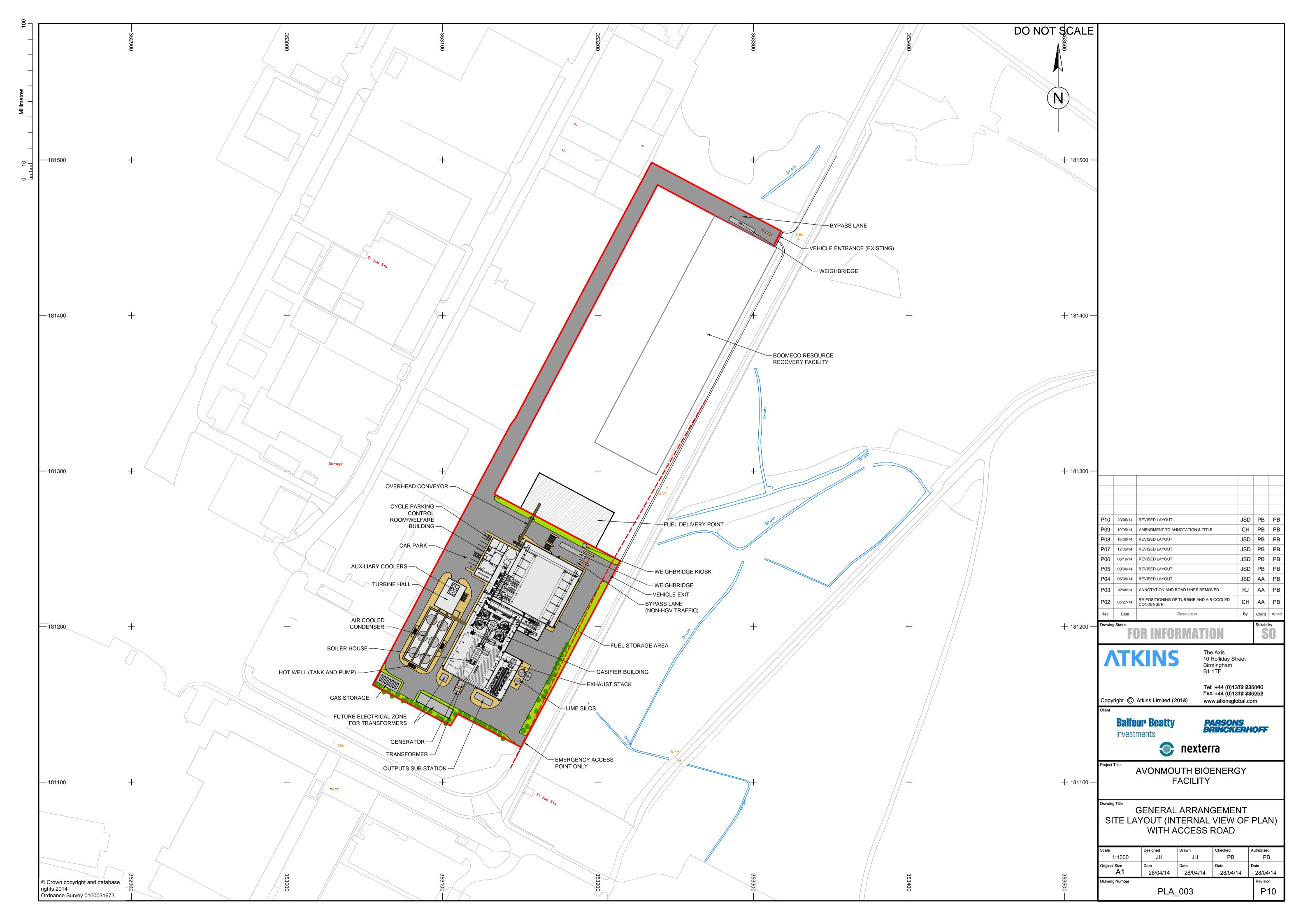
The Severn Estuary Special Area of Conservation (SAC) Features of Interest:

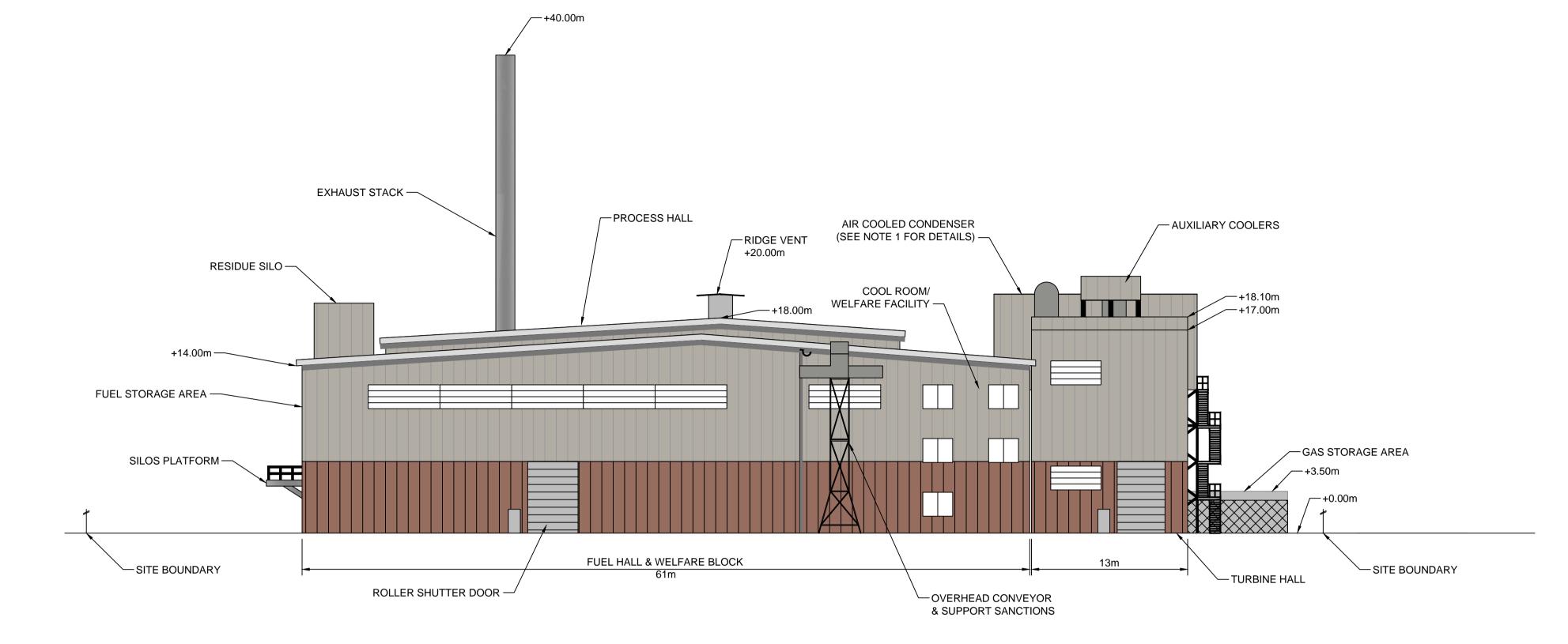
Estuaries Subtidal sandbanks Intertidal mudflats and sandflats Atlantic salt meadows

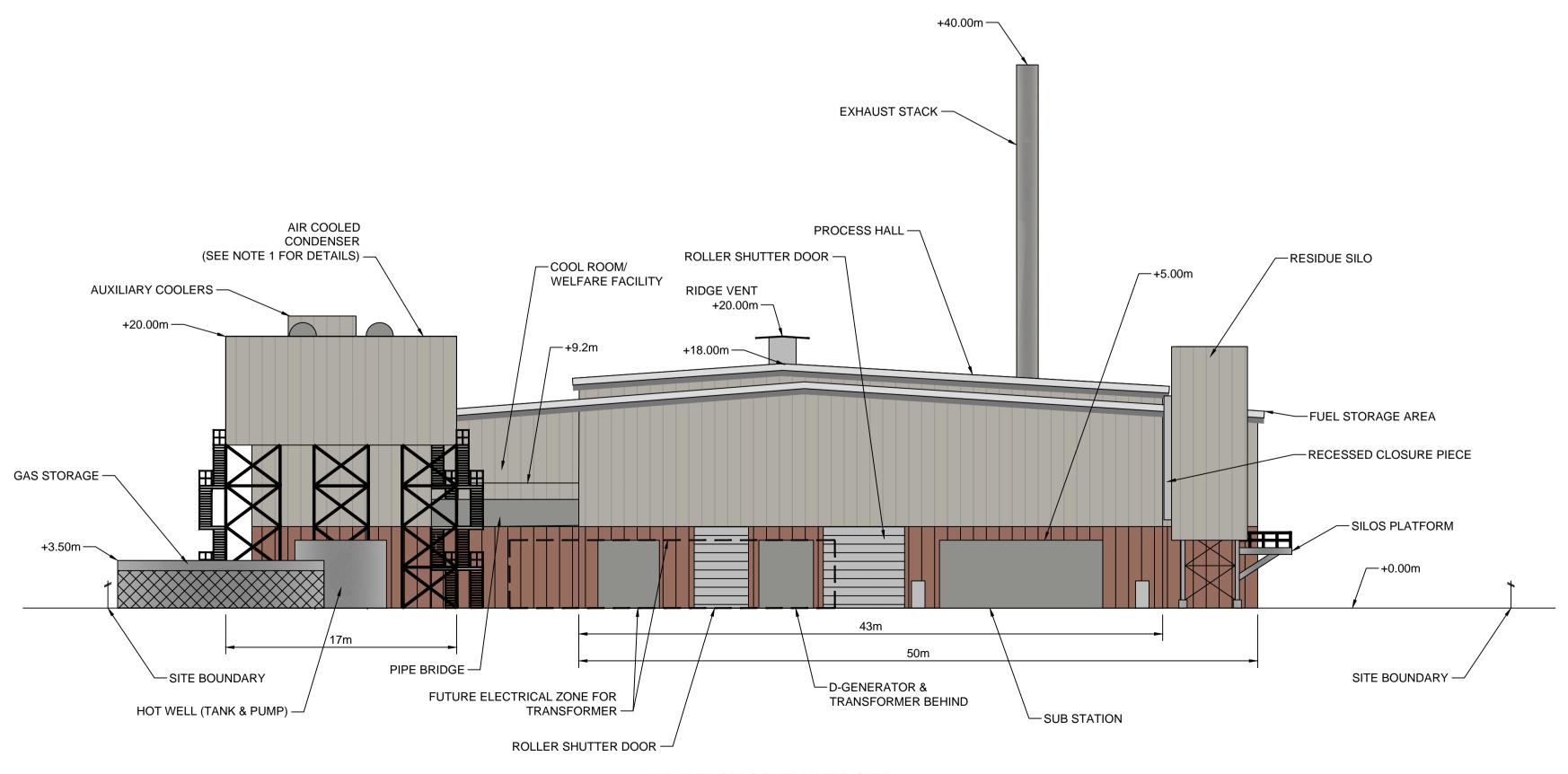
Reefs (on the shore line as well as subtidal) Anadromous fish (river lamprey, twaite shad and sea lamprey

3. The applicant is advised that the Severn Estuary and its supporting habitat is a highly protected site for wildlife and ecology of international importance.









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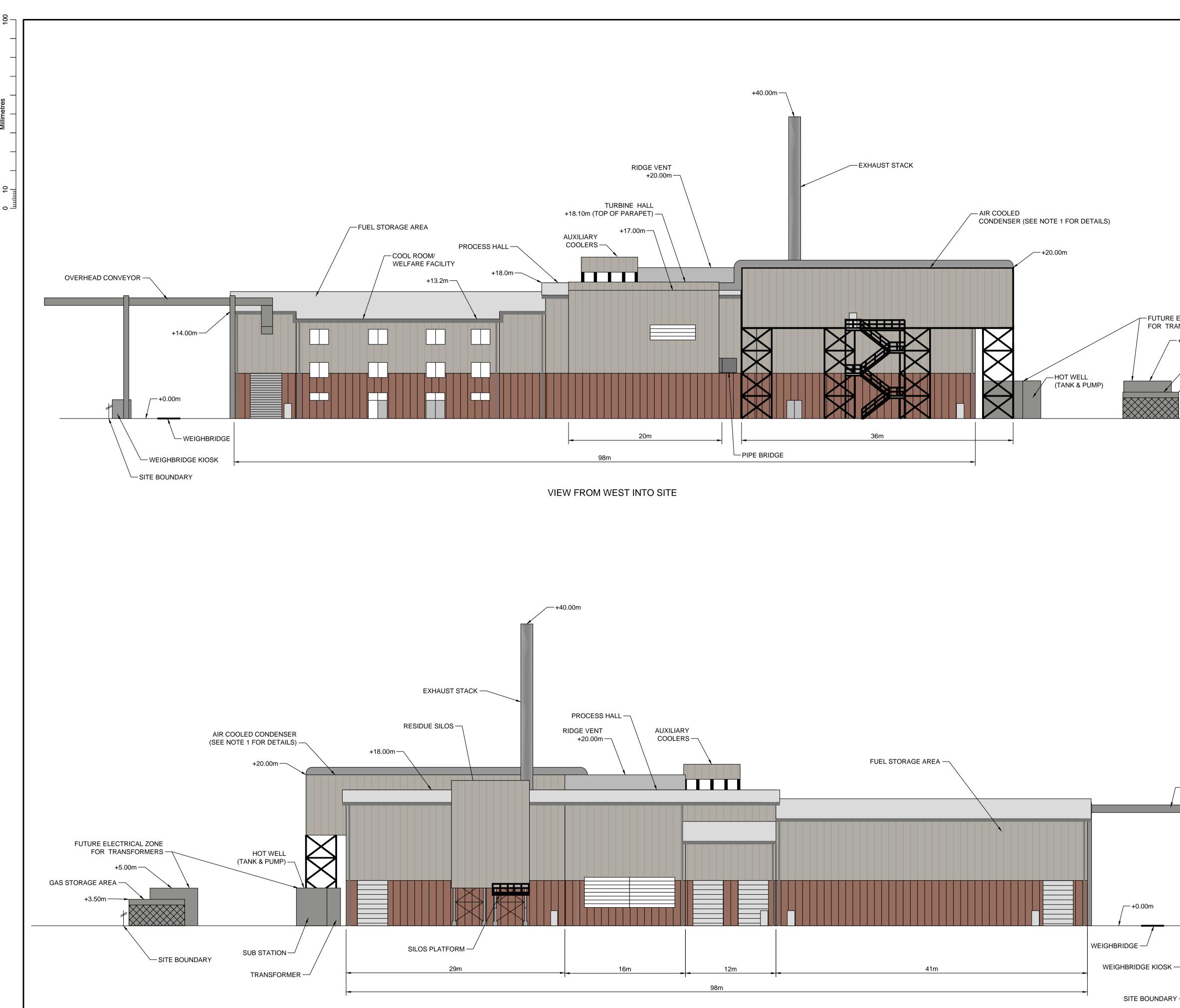
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VIEW FROM NORTH INTO SITE

VIEW FROM SOUTH INTO SITE

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VIEW FROM EAST INTO SITE

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Viewpoint 3

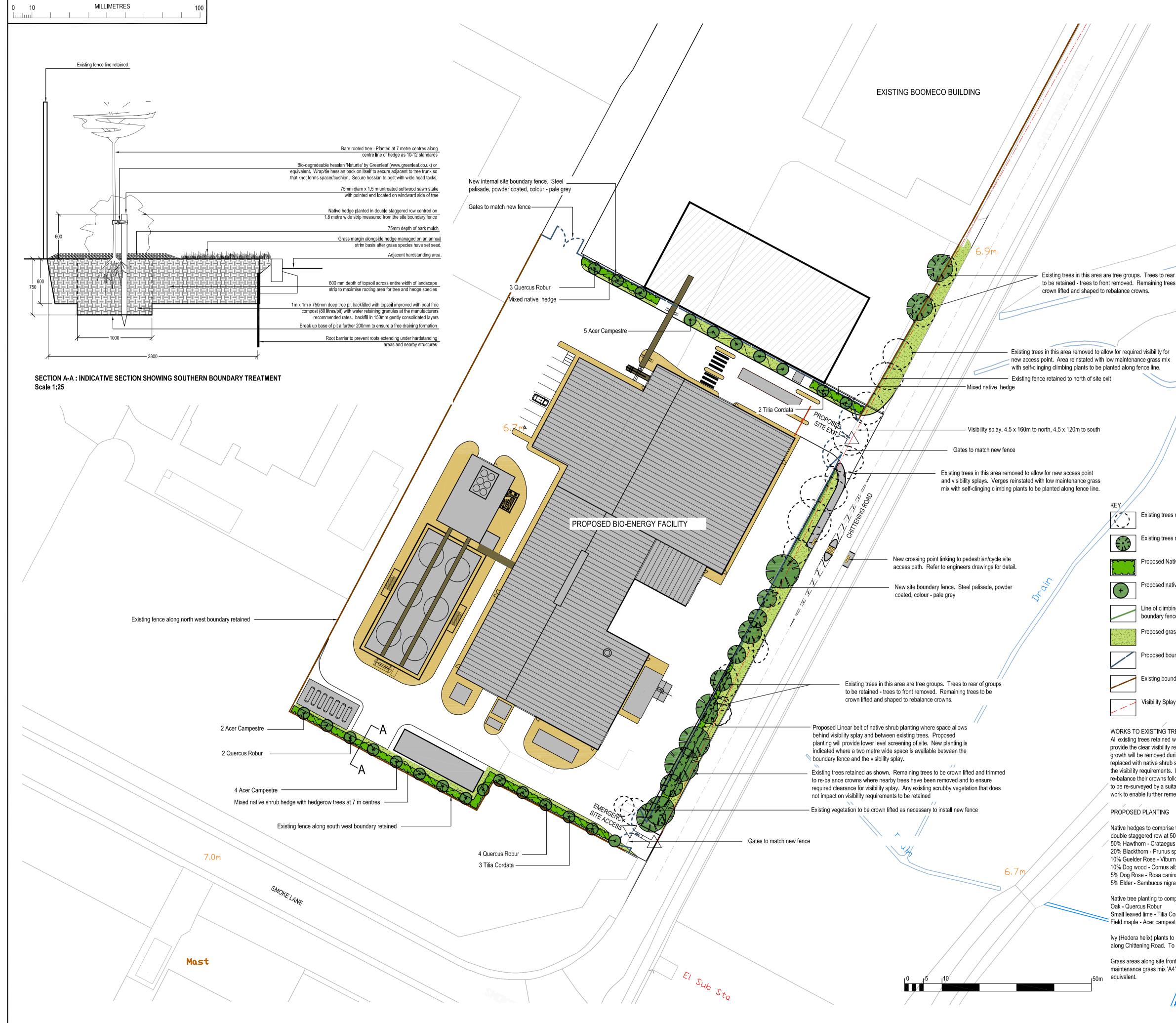


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Avonmouth Bioenergy Facility

Non-Verified Photomontage 2 Viewpoint 3

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p rear of groups trees to be trees to be	CONJUNCTION WITH THE SPECIFICATION AND ALL RELEVANT ARCHITECTURAL, ELECTRICAL, MECHANICAL AND STRUCTURAL DRAWINGS.
for mix	
trees removed trees retained d Native hedge planting	
d native heage planting	ISSUED FOR PLANNING
limbing plants along site y fence	
d grass areas	
d boundary fence	
boundary fences retained a F	Tree species, quantity and sizes AW 09/10/14 NJR NJF amended. Detail AA added. Hedge composition clarified all Image: Species and the second
СА	requirements Additional trees added along AW 07/10/14 NJR NJF
G TREES TO BE RETAINED ned will require pruning to lift the crowns sufficiently to ility required for the new site access point. Lower level ed during this process. Where space allows this will be hrub species that can withstand regular pruning to maintain	north and south boundaries AW 02/10/14 NJR NJF Landscape proposals along AW 02/10/14 NJR NJF Chittening Road boundary updated to reflect tree survey. AW 02/10/14 NJF Road crossing added Image: survey and survey
ns following removal of adjacent trees. All remaining trees	DESCRIPTION BY DATE CHK'D AUT VTKINS Atkins Limited 500 Park Avenue Aztec West Source West
NG	Almondsbury Bristol BS32 4RZ
	Telephone +44(0)1454 662000 Fax +44(0)1454 663333 IT: Ifour Beatty estments Nexterra
p comprise the following species, planted as 10-12 standards:	ECT:
lia Cordata AVG	ONMOUTH BIO-ENERGY FACILITY
nts to be planted as climbers in front of site boundary fence d. To be planted at base of fence at 3 metre centres.	
e frontage and alongside hedges to be seeded with low ix 'A4' by Germinal Seeds (formally British Seed Houses) or	NDSCAPE PROPOSALS
PROJE	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

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